

### REMARKS

Claims 1-34 and, upon entry of this response, new claims 35 and 36 are pending.

A revised copy of Fig. 2 is attached.

Claims 1-9, 11-21, and 23-34 are understood to be rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 2,618,908 to Salter et al. ("Salter") in view of U.S. patent no. 3,913,613 to Kostjunin ("Kostjunin").

Salter discloses a gas pressure regulator having a spring 78, which cooperates with an adjustment screw 82 for adjusting bias applied to a piston 38. Salter, Fig. 1; 3:32-39. As noted in the Office Action, Salter does not disclose gas bias. Indeed, Salter seeks "to eliminate the use of a diaphragm in the gas pressure regulator" citing "a danger of . . . pinhole leaks." *Id.*, 1:17-25. Accordingly, Salter motivates away from the use of gas bias in a pressure regulator. One would not have been motivated to modify Salter to include a gas-tight chamber (claims 1, 13, 23, and 24) or a sealed chamber (claim 34), as presently recited.

It is respectfully submitted that, in view of the foregoing, a prima facie case of obviousness with respect to claims 1-9, 11-21, and 23-34 has not been set forth.

Claims 10 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 5,303,734 to Eidsmore ("Eidsmore") in view of U.S. patent no. 4,561,465 to Rogers ("Rogers").

Independent claims 1 and 13, from which claims 10 and 22 respectively depend, refer to a gas-tight chamber comprising "a resilient element for generating a second portion of said predetermined force, the resilient element configured to urge the pressure sensor element toward the first position." The first position is an open position in which fluid may pass from the inflow opening to the outflow opening.

Eidsmore discloses a pressure regulator including a spring 120, which biases the pressure regulator toward its closed position, rather than toward its open position. Eidsmore, 6:33-40. Indeed, spring 120 "assure[s] that the poppet moves to the closed position if the charge is lost." *Id.* Accordingly, modifying Eidsmore to include a resilient element that urges a pressure sensor element to the open position would change the principle of operation of Eidsmore.

In view of the foregoing, the Office Action has not set forth a prima facie case of obviousness with respect to claims 1-9, 11-21, and 23-34.

New claims 35 and 36 are also submitted to be patentable over the cited art. For example, Eidsmore discloses that "as the bellows flattens and approaches its stack-height, the spring rate of the bellows becomes very high." Eidsmore, 6:12-14. Eidsmore also teaches that a biasing force of a spring tends to urge movable portion 34 toward the outlet. *Id.*, 6:43-45. Accordingly, Eidsmore teaches away from claim 35, which recites "a sealed chamber comprising a movable wall connected to [a] valve for regulating the pressure in the fluid path based only on a difference between [ ] first and second pressures." Eidsmore also teaches away from claim 36, which recites that the "position of the movable wall with respect to the housing [is] determined by a sum of axial forces resulting from the first and second pressures acting upon the movable wall." The first and second pressures result from fluid.

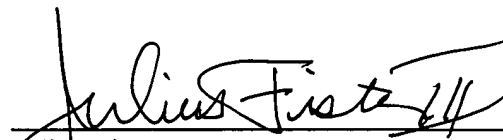
Applicants respectfully submit that the application is in condition for allowance. If, however, there are any remaining issues to be addressed, a telephone interview is requested to address such issues.

Enclosed is a \$172 check for excess claim fees and a \$950 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date:

August 12, 2004



Julius Fister III  
Reg. No. 46,702

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906